LEVERAGING BUSINESS RULES MANAGEMENT SYSTEM TO IMPROVE THE DECISION-MAKING PROCESS

Industry: Healthcare

Tools: React, D3.js, Node.js, Visual Studio Code, Azure Functions, Azure Storage, Azure AAD

Platforms: Azure Cloud Platform, Chrome, Firefox, Edge

Benefits

60%
Cost reduction

5x
Faster processing of new orders

Background

The client is a US independent supplier of medical products and services, existing on the market for 20 years. Besides providing medical supplies, they also focus on answering questions about products and insurance. Their focus is on providing their patients and customers with the best products and services.

Challenge

The Client was using rules to make decisions in the business processes, but these rules were scattered, applied manually, and complex (having multiple levels). Handling manually all these rules was a time-consuming and error-prone process. What they needed was a solution that will organize and centralize the business rules related to making decisions in the business processes.

The solution was based on client's high-level business requirements and included creating an easy-to-use graphical business rules editor and rules execution engine.

—— SOLUTION

The solution is a SaaS solution on the Azure Cloud platform that is cost-effective and scale on-demand. It consists of Rules Editor UI developed in React and D3.js for decision tree visualization with editing capabilities. In addition, an Administration UI is implemented that manages access to different rules files. On the backend, there is serverless API for managing and editing rules and an execution engine API, both developed in Node.js and using Azure Functions. The execution engine is powered by Nools.js, a Rete-based rules engine.

Business Outcomes

By using the solution, the Client simplified the decision-making process, and significantly reduced the time needed to reach a decision, which influenced the operational efficiency of the company. Key benefits:

- Secure platform
- Cost-effective, reduced the costs by 60%
- Highly-available
- Processing of new orders in less than a minute